CITY OF Burlington

SUBJECT: Asset management program update

TO: Corporate Services, Strategy, Risk & Accountability Cttee.

FROM: Finance Department

Report Number: F-49-20

Wards Affected: All

File Numbers: 701-04

Date to Committee: December 10, 2020

Date to Council: December 14, 2020

Recommendation:

Receive and file finance department report F-49-20, providing the city's asset management program update.

Purpose:

The purpose of this report is to provide Council with information on anticipated and known impacts that will drive changes in the next update of the Corporate Asset Management Plan (AMP) and Financing Plan scheduled for completion by Q2 2021. This report serves as a companion report to the 2021-2030 Capital Budget Overview report (F-42-20) as it pertains to the city's capital renewal program.

The report will also outline the process the city will undertake to complete this update and subsequent updates for the city's remaining assets to target completion as per Ontario regulations.

Vision to Focus Alignment:

- Support sustainable infrastructure and a resilient environment

Background and Discussion:

On April 18, 2017, Council approved the Asset Management Plan (AMP), which was revised and refined significantly to meet legislative requirements and provides the city's most comprehensive and detailed asset management plan to date. The financing plan was approved on May 15, 2017 (report F-12-17) and used the information from the AMP to determine the sustainability and effectiveness of the financing plan and any changes proposed.

The AMP included the following:

- City assets with a combined replacement value of approximately $3 billion
- City's unfunded renewal needs (backlog) of $126.5 million
- Overall "Good" (adequate for now) condition of city assets
- 95% of capital assets identified within corporate inventory

The financing plan at that time included the following;

- Dedicated Infrastructure levy of 1.25% (up to 2022), reducing to 1% (2023-2033) and further reducing to 0.5% (2034 and beyond)
- re-purposing the hospital levy in phases beginning in 2019
- 0.2% levy beginning in 2020 to address the renewal needs of a growing asset inventory
- Backlog being eliminated by 2027

Asset Management Regulatory Compliance

The update of the AMP and Financing Plan is a significant undertaking and as such, staff committed to updating the plan every four years. However, new provincial asset planning requirements, in the form of O.Reg 588/17 in the *Infrastructure for Jobs and Prosperity Act*, are now in effect. The regulation will impact the delivery and timing of how Council will see the next AMP update.

The timelines as outlined by the Province are as follows:

Deadline	Description of Requirement
July 1, 2019	Council approved Strategic Asset Management Policy (SAMP)
July 1, 2021	**Municipal Asset Management Plans (AMPs) for “core municipal infrastructure assets” that address current service levels, asset performance, condition, age and replacement cost and the 10-year life-cycle costs and funding required to maintain those service levels.**
July 1, 2023	Municipal Asset Management Plans (AMPs) for all “other infrastructure assets” that address current service levels, asset performance, condition, age and replacement cost and the 10-year life-cycle costs and funding required to maintain those service levels.
July 1, 2024	AMPs for ALL municipal infrastructure assets that build on the requirements set out for 2021/2023 AMPs and address proposed levels of service, activities and funding required to meet those levels of service and any estimated funding shortfall.
Ongoing	Municipal Council shall conduct an Annual Review of its AM Planning Progress.
Ongoing	Every AMP will be reviewed and updated at least as frequently as once every 5 years.
Ongoing	Every AMP developed by the municipality and any subsequent updated AMPs will need to be endorsed by the Executive Lead of the municipality and approved by resolution of the municipal council.
Ongoing	A municipality must post its current SAMP and AMP on a public website and provide a copy on request.

The City has fully complied with the first requirement of the regulation. In 2019, Council approved the updated Strategic Asset Management Policy (report CW-30-19). This policy replaced the previous corporate policy that was approved by Council in December 2016.

Moving forward, the City is on track to comply with the next phase of the regulation. To do so, the City has retained the services of GM BluePlan Engineering Ltd. (GMBP) to assist in updating the AMP and meeting the regulation requirements by the July 1, 2021 deadline.

Asset Management Plan Update: Project Overview

As part of the overall project plan, GMBP will provide the required support to enable the City to develop an Asset Management Plan that incorporates all core assets including transportation and stormwater, that is compliant with regulatory requirements. In addition to core assets the City’s major recreation buildings will also be included.

A breakdown of asset groupings included are as follows:

- Road and Pedestrian network
- Bridges and major culverts
- Minor drainage systems (storm sewers, small culverts)
- Retaining and noise walls
- Guard rails
- Gateway features, and signs
- Streetlights, traffic signals, transit shelters
- Parking lots
- Stormwater ponds, storm sewer network
- Major recreational buildings

The update will be significantly more robust than previous due to the demands of the regulations. The update for the above assets will consider the following:

- State of Infrastructure
- Gap assessment
- Development of;
  - level of service framework and strategy
  - lifecycle framework and management strategies
  - risk management frameworks, risk models and analysis
  - asset management system continuous improvement roadmap
- Financial analysis and strategy development

Remaining asset classes (other facilities and buildings, parks, fleet & equipment and information technology) will be updated and incorporated in the state of infrastructure and financing strategy only. Level of service, risk and life cycle strategy development will be undertaken for these remaining classes as part of the next regulatory phase (due by July 2023).

Impacts to the Asset Management Plan & Financing Plan

Since 2016, changes have been experienced as they pertain to the city's infrastructure. These changes are anticipated to impact the city's asset management plan and overall financing strategy. Those changes are highlighted as follows:

Net New Additions to the Asset Base

The City's asset base is constantly growing through the construction and acquisition of new infrastructure. Examples include linear assets assumed through development, facility acquisitions like Sims Square, and fleet expansion such as transit buses.

In addition, data on the city's existing assets are continually being refined and added to the asset register. Examples include underground servicing in parks, where existing records were not complete.

Assets that were included in the 2016 plan, such as natural assets, were reported on at a high level and not included within the overall financing plan. With the introduction of O.Reg. 588/17 the city will be required to integrate inventory, and value of green infrastructure, including natural assets which will impact both the state of infrastructure and corresponding financing plan.

Level of Service (LOS) Impacts

The city's existing inventory of assets is based on renewing or replacing assets at similar function or equivalent utility. The asset management plan coming forward in 2021 will reflect values that are more closely aligned with changes to the level of service standards across all asset categories.

Much of the City's infrastructure is following an "incurred standard," meaning that in the absence of a defined level of service, there is an expected level of service that the city has been delivering on. This expectation supports projects that are aligned to the city's Vision to Focus initiatives and overall Strategic Plan. This trend is most evident in the facilities and parks categories. As service levels increase, the infrastructure needed to support service delivery will be costlier and will be reflected in the financial analysis.

For the City's core assets, the current service level will be assessed, and the required infrastructure needs identified for sustainable service delivery.

Several examples of incurred service level standard changes, include:

- In roadways, the goal of increasing modal split and transforming the transportation network into more "complete streets" (e.g. Plains Road, physically separated cycling facilities);
- Improving environmental sustainability and building climate resiliency, by incorporating vulnerability considerations and adaptation responses into existing and planned capital projects (e.g. increasing infrastructure capacity, incorporating natural and green infrastructure);
- For facilities, more complex and intricate design has led to increased costs associated with project administration, achieving environmental and efficiency targets (LEED, carbon-neutral, geo-thermal), and meeting legislative standards (e.g. accessibility);
- New buildings, the renewal of existing buildings, or building expansions are not designed or constructed to a similar function or equivalent utility. Facilities are undergoing a significant and costly transition, where previous design standards are no longer desired (e.g. Joseph Brant Museum: replacement value $2.8 million, project cost $11 million).

The result of what is occurring is twofold. First, the current replacement value is vastly understated, in turn underestimating our annual renewal need. Secondly, the existing financing plan does not capture these increased costs. As such, the limited dollars attributed to the renewal program are being allocated to unplanned expenditures which result in increased backlog, and an unsustainable long-term financing strategy.

Asset Useful Life

Previous state of infrastructure reports applied uniform asset useful life values across various types of assets. For example, mainline storm sewers were given a useful life of 60 years, regardless of size or material. Staff have now assessed the lifespan of each asset type and are beginning to consider typical in-service conditions. Adjustments have now been made that will have an impact over the long-term forecast.

Recalculation of Current Replacement Value (CRV)

The city's replacement values as per the 2016 AMP for the below asset groups were valued at approximately $2.9 billion, as per the following table;

Asset Category	Replacement Value
Facilities & Buildings	$547.7
Roadways	$2,013.3
Stormwater Management	$66.6
Parks & Land Improvements	$200.3
Fleet - Vehicles & Equipment	$70.6
Information Technology (IT) Services	$44.7
Total	**$2,943 B**

For the 2021 AMP update, staff anticipate changes to the replacement values. All replacement costs calculated in 2016 were based on renewing or replacing assets to a similar function and equivalent utility, and the values were based on market replacement data and analysis of historical renewal expenditures.

Current replacement value (CRV) is a better measure for making informed decisions. Staff are working to determine and/or update those costs using existing contracts and data, as well as labour rates and suppliers' price lists.

Financial Matters:

The 2016 financing plan used the financial variables that were known at that time in modeling a cash flow over a 60-year period. The following provides a brief summary of the overall funding strategy and key changes that have taken place to date.

Dedicated Infrastructure Levy: A dedicated levy towards infrastructure represents a consistent and strategic approach to investment in the city's replacement needs that is both sustainable in the short and long term. The financial model included the following to address infrastructure;

- Dedicated Infrastructure levy of 1.25% in 2020 (up to 2022), reducing to 1% (2023-2033) and further reducing to 0.5% (2034 and beyond)
- Additional 0.2% levy to address the renewal needs of a growing asset inventory

Key Changes:

- 2021 budget proposes the repurposing of the dedicated infrastructure levy of 1.25% for one year ($2.18 million)
- The City has not added the additional 0.2% as planned due to difficult budget deliberations ($349,000 annually)

As this is an unprecedented year, we recognize it is important that we draw on our financial resources to mitigate the impact to the public due to the significant financial challenges posed by Covid-19 on the 2021 budget. However, keeping in mind it is not recommended that the infrastructure levy be used to mitigate future operating budget challenges as the erosion of infrastructure funding does not allow for timely capital maintenance and can result in increased capital and operating costs due to the reliance on reactive maintenance and impacts to service levels.

Hospital Levy: The plan included phased repurposing of the hospital levy towards infrastructure beginning in 2019 ($1.7 million) as contributions to the hospital were fulfilled, however debt repayments remain. The later phases of repurposing the hospital levy were planned to occur for $500,000 in 2026 and $2.6 million in 2027.

Key Changes:

- Council amendment during the 2019 budget process, the full value of the hospital levy was not repurposed to infrastructure. ($770,000 annually, $46 million over 60 years)

It is important that the future phases of the hospital levy are repurposed as planned so the financing strategy remains sustainable and predictable. Based on current cash flow requirements the next phases are anticipated to occur in 2022 $100,000, 2025 $100,000, and 2027 $2.9 million.

Reserve and Reserve Funds: Reserve and reserve funds are a critical component of the city's long-term financial planning. With respect to the City's infrastructure needs, they represent planned sustainability for today and the future. The asset management financing plan conservatively employs the city's reserve and reserve funds without impacting financial flexibility and overall liquidity. The financial model continues to include a stable approach to using the following capital reserve funds in the financial plan.

- Burlington Hydro reserve fund
- Capital reserves & reserve funds (various)
- Parks & Recreation Infrastructure reserve funds (various)
- Federal and Provincial Gas Tax

Key Changes:

- As per the June 2019, BMA financial condition assessment an analysis of the city's capital related reserve funds shows a decline of $5 million (11%) since 2014.
- Significant decline in annual Hydro revenues, approximately $1.2 million beginning in 2021. We do not anticipate a change in the funding support provided by the HRF.
- The city is targeting a balance equal to 2% of the total asset replacement value, this equates to approximately $60 million. As of September 2020, the City's uncommitted consolidated year-end balance in capital reserve funds is approximately $31.3 million, below the intended target.

Councils' approval of the Interest Allocation policy will assist to increase the overall capital reserve fund balance. The policy will allocate capital gains earned in excess of the investment income budget equally between the infrastructure renewal reserve fund and the tax rate stabilization reserve fund. The financing plan will be re-visited to ensure adequate reserve requirements are in place based on the inventory of capital assets and planned spending requirements.

Debt Policy: The city's debt policy allows for total debt charges as a percentage of net revenues to be no greater than 12.5%, and the city's tax supported debt policy is limited to 10% of net revenues. As per the city's long-term financial plan, the city continues to phase in a reduced reliance on debt as a funding source for ongoing renewal needs. As such, the 2016 asset management financing plan did not consider the use of debt beyond the first ten years of the financing plan as a sustainable funding source for renewal needs.

Key Changes:

- The City may consider employing a baseline level of debt as a reasonable approach to the city's infrastructure needs.

Any consideration of debt beyond what is forecasted in the model will increase the city's debt as a percentage of net revenue fund revenue, as well as debt borrowing costs. The use of debt is not indicative of a long-term sustainable strategy but rather a short-term solution to a long-term issue.

Grant Programs: There is opportunity to increase revenue potential through the receipt of infrastructure grants from senior levels of government. Recently, a number of grant programs have been released albeit not all related to infrastructure renewal.

Key Changes: Since 2016, the City has applied/ applying to the following programs in which partial funding may be used towards existing infrastructure;

- Investing in Canada Infrastructure Program (ICIP); supports the construction, expansion and improvement of the public transit system, recreation
- Covid-19 Resilience Infrastructure; supports municipal infrastructure needs to enable physical distancing (recreation centers, trails)

The city will maximize any potential dollars that can assist in reducing our unfunded renewal needs at a faster rate and/or assist in addressing our annual renewal needs. Keeping in mind that government grant funding is not a sustainable funding source, as it is one-time in nature and timing and monetary value of the programs are uncertain.

It is important to keep in mind and as mentioned in the 2016 financing strategy, that though the asset management plan and related financing plan is a 60-year plan, we continue to focus within a 20-year window ensuring that the objectives of the asset management financing plan are on target over 20 years. Based on the changes that we have discussed above for both the asset needs and revenue projections, our financing strategy will not be sustainable over the short term. The funding options represent a holistic approach to funding our infrastructure needs and with financial pressures on each area of our strategy, it is anticipated that in future the City will need to put greater emphasis on the importance of the dedicated infrastructure levy. The objective will be to minimize the financial impact to the AMP and ensure that the financial plan does not lose significant traction.

Climate Implications

Increased climate variability introduces significant uncertainty into both existing infrastructure preparedness and planning for future infrastructure needs. Climate change will affect the way that the City manages its infrastructure, with impacts on condition, planned service life, and overall reliability of assets. This will be evidenced through an increase in reactive maintenance, as well as in the timing and costs associated with changes to maintenance schedules, renewal interventions, and the need for new capital investments.

When possible, the City allocates funding to assist with climate change efforts. For example, the city set aside funding towards stormwater management to address flood mitigation brought on by climate change events.

As part of the asset management plan update the city will be developing a risk framework and will incorporate the management and mitigation of risks and the increased costs required to manage risks due to climate change.

Engagement Matters:

As part of the 2021 AMP update to the city's core assets and recreational facilities, the City will be establishing current levels of services and performance measures with internal stakeholders. Moving forward to meet the objectives of O.Reg. 588/17, the City will be establishing proposed levels of service that will be focused on both customer outcomes and service delivery while balancing customer expectations with risk and affordability. Our goal is to actively encourage community and stakeholder collaboration to understand future needs and incorporate them into subsequent iterations of the city's asset management plan.

Conclusion:

The overall goal of asset management is to achieve value from the city's physical assets. This is achieved by optimizing cost, risk and performance over the long-term, and using that to inform capital investment decision-making. The factors discussed in this report will have an impact on the city's long-range asset management plan and financing plan. It is understood that, as with all long-term plans, it is necessary to make short-term strategic adjustments. In doing so, it is important that the factors discussed are considered and balanced against the current financial environment.

City staff are continuing the process of working towards a completed asset management and financing plan to meet O.Reg. 588/17 the *Infrastructure for Jobs and Prosperity Act*, working together with GMBP. A complete and comprehensive update on the state of the city's infrastructure will be provided by July 1, 2021.

Respectfully submitted,

Reena Bajwa
Coordinator of Financial Strategies & Business Consulting

Andrew Maas
Manager of Infrastructure & Data

Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.